## State of the North Carolina Workforce 2011-2020

"Preparing North Carolina's Workforce and Businesses for the Global Economy"



## **Executive Summary**

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# The North Carolina Commission on Workforce Development



"Preparing North Carolina's Workforce and Businesses for the Global Economy"

This report is a product of the North Carolina Commission on Workforce Development, under the direction of the Research and Assessment Committee, chaired by J. Paul Combs.

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#### **Executive Summary**

This study examines the state of North Carolina's workforce in 2010-2011 as a result of in-depth analysis of economic and employment data as well as a number of interviews with key stakeholders across the state during the late fall of 2010. It also evaluates the impact of the 2008-09 recession (sometimes referred to as the "Great Recession") and the ongoing structural economic shifts described in the previous 2007 State of the Workforce Report. An important goal is to assess North Carolina's readiness to meet current and future workforce challenges.

In short, these challenges are largely tied to the rapid effects of change on the state's industries, their workers, and its communities. Many of the most severely impacted industries are those traditionally competing for business based on relative cost advantages. Those industries are feeling the greatest global competitive pressures and must change to survive. Many are also located in communities that traditionally provided a large available low-skilled labor pool. For many years, these companies served as the state's backbone in creating a low-skilled, middle class. In order to survive and ultimately thrive again in this economic climate, these very same industries (including manufacturing, construction, and others) must make significant changes. This means that their workers, often employed in low-skilled occupations that offered moderate, family-sustaining wages are at greatest risk. Furthermore, it means that communities where these activities were most prevalent – such as the rural/micropolitan areas and a selected few metropolitan areas – are also suffering the greatest from economic dislocation and transition.

The impact of this dislocation is further complicated by the types of industries emerging as replacement employers for North Carolina workers. Because an emerging knowledge-based economy uses skilled talent to create a competitive advantage, emerging growth industries rely on workers who can demonstrate innovation and unique capabilities. These characteristics often derive from combining knowledge with creative instincts. For many low-skilled, dislocated workers, these skills may be beyond their reach without a significant investment of time and resources in education and training.

A key finding from this 2011 Report is that the recession accelerated the state's shift to this knowledge-based economy because firms had to adjust to this new reality in a much shorter timeframe. Unfortunately, many workers—incumbent and dislocated alike—as well as a large share of current jobseekers are simply not prepared for the transition and face severe challenges in adapting to this new economic reality.

#### North Carolina's workforce challenges

Ultimately, this report seeks to articulate the state's most critical workforce challenges and offer a framework for setting policies that can address them. The following summarizes ten key challenges as well as the economic trends creating them.

#### 1. Worker dislocation accelerated during the recession due to long-term structural changes.

While manufacturing job losses have been particularly prominent in the NC economy since the sector's peak in the late 1990s, many industries are exploring ways to increase productivity by

changing the way they work. In manufacturing and in low-skilled service industries, off-shoring was a common strategy employed by many companies pursuing lower costs. They simply moved low-skilled jobs to countries offering lower wages. However, for other companies seeking a more sustainable U.S. business model, the focus has been on redesigning their business processes to increase efficiency and expand the use of technology. As firms begin to rehire during the recovery, they are not likely to simply replace the workers they shed before the recession. Instead, businesses are much more likely to seek more highly-skilled workers who can do very different jobs than workers did before the firm began transforming its business model and work process.

2. Workers employed in low-skill, middle-wage jobs are competing for fewer good-paying jobs while opportunities offering similar wages (i.e., "new middle" jobs) demand higher skills.

The disappearing middle jobs highlighted in the 2007 State of the Workforce Report — those that offered a family sustaining wage for individuals with limited educational experience — are not completely gone, but fewer of these types of good-paying jobs are available and they are at a greater risk of elimination as a result of technological change or globalization. Workers dislocated from these careers are finding that they seldom qualify for the available careers offering wages similar to what they once earned. Instead, these dislocated workers are having to settle for one of the growing number of low-wage, low-skilled occupations created by other industries. Consequently, these workers are also competing against other low-skilled workers for these lowerwage jobs with only limited opportunity for advancement. Furthermore, even if transitioning workers invest some time or resources in education or training, they are having to compete against other entry-level workers, with little guarantee that, in the short-term, their wages would be the same or higher than in their old jobs.

3. While metropolitan workers have a more diverse set of career possibilities, they must continuously adapt to increasing demands in the workplace and a more competitive labor market.

In general, metropolitan economies are bouncing back from the recession at a more rapid pace than the state's micropolitan or rural areas, but the recovery is uneven. The largest proportion of available jobs will be in metropolitan areas and their success is crucial to help the state get people back to work and bring down the unemployment rate. For those metropolitan areas with high concentrations of industries undergoing structural change, the recovery is likely to take longer than elsewhere. In the rapid-growing metropolitan areas, the economic fundamentals – as measured by per capita income, educational attainment, and industry diversity – are strong, but many workers struggle to adapt. These high-growth areas will also be important assets for the state as it develops strategies for getting people back to work quickly.

4. Dislocated or young workers in economically hard-hit micropolitan and rural areas have very limited alternatives for employment.

Job opportunities in rural and micropolitan areas are not always readily available for skilled workers, even during the best economic times, but those opportunities were particularly scarce during the recession. For that reason, job losses in manufacturing, which were especially severe in the state's small cities, created significant hardships in places, leaving no viable employment alternatives. As a result, during the Great Recession, unemployment rates were much higher in the micropolitan

areas. While the outflow of people to metropolitan areas will likely continue, it was mitigated during the recession by the poor economy elsewhere. As the economy recovers, many rural/micropolitan jobseekers will ultimately have to seek careers in new industries (because their old jobs will not likely return) or seek jobs elsewhere. Some of these jobs may be in places within a reasonable commuting distance, but many others will likely be in places that are not nearby. Thus, rural/micropolitan areas, already struggling economically to retain their best employers, are simultaneously struggling to keep their most skilled workers.

## 5. Seeking good-paying jobs, more workers must increase their skills by accessing and completing education beyond high school or by earning industry-recognized credentials.

At least 42 percent, perhaps many more, of the new jobs being created in North Carolina will require at minimum some post-secondary education, many in Science, Technology, Engineering and Math—STEM—disciplines. This may represent an underestimate because businesses are increasingly opting to replace lower-skilled workers (lost through attrition and layoffs) with more highly educated or trained employees. An even higher share of new, higher-wage jobs will require STEM-related skills, and many of those jobs will require post-secondary education or industry-recognized credentials. In particular, STEM jobs will constitute an increasing share of higher and medium-wage jobs, creating significant barriers to employment for unprepared young adults and existing workers. For many low-skill workers and students, gaining access to STEM academic training, as well as affording the time and resources to take the training, could represent potential insurmountable barriers due to the breadth of the gap between their current skill level and the skill required for emerging or indemand jobs.

## 6. The recession slowed baby boomer retirements, but the impact is likely to be felt first and greatest in micropolitan and rural areas where more workers are near-retirement age.

A significant demographic challenge facing all communities is the retirement of the baby boom generation, which began turning 65 in 2011. The economy has delayed the on-set of retirement for many "experienced" workers by as much as three to four years. As industry labor force demands continue to increase, the ultimate exodus of baby boomers from the workforce will first ease the current high unemployment rates, but then ultimately could result in a subsequent shortage of experienced workers. While the recession-induced "retirement pause" among baby boomer workers can help companies in the short-term, this delay also has the unintended consequence of slowing career growth for many Generation X and Millennial workers waiting for those baby boomer retirements. Consequently, firms will need to create explicit succession plans, especially in mission critical occupations. At the same time, many dislocated, lower-skilled older workers must now learn completely new jobs that may require long-term education or training that some older workers may strongly resist.

## 7. High-skill in-migrants recruited to help companies meet their talent requirements are seeking jobs in amenity-rich metropolitan areas.

The Census Bureau reports that North Carolina attracted more new in-migrants with a four-year degree or higher in 2008-09 than the state's university system graduated. Furthermore, if these trends continue, the number of people born outside of North Carolina will surpass the number of native North Carolinians within the next three years. As this shift continues, the very fabric of the state's culture will also continue changing. New high-skill in-migrants are helping to foster growth, but due to their diversity, they create a new set of challenges, especially since they tend to concentrate in certain parts of the state. For companies seeking high-skilled workers, national recruitment efforts are invaluable in finding the workers they need and filling the gap that exists in the current labor market. However, North Carolina's success in attracting workers has been concentrated to its metropolitan areas, but the talent is needed throughout the state. Furthermore, the prevalence of in-migration might also be masking a potential mismatch between the skills that students in the state's higher education system are learning and the skills that North Carolina industry requires.

## 8. Migration of new workers continued at near pre-recession levels, even among low-skilled workers, despite the limited availability of jobs.

Migration also accounted for 80 percent of North Carolina's population growth during the past decade. Recent Census data suggests that in-migration continued at a relatively rapid pace even during the recession. This was true even among lower-skilled in-migrants locating in communities across the state. A relatively larger concentration of migrants is of Hispanic or African American origin. Growth among these groups accounted for 44 percent of urban population growth and more than half of rural/micropolitan growth during the past five years. Many more slow-growing rural counties would have experienced population decline without an influx of Hispanics. Thus, the areas that have endured the greatest economic dislocation also have been most successful in attracting minority workers because they are willing to take many of the low-wage, low-skill jobs being created in smaller communities.

## 9. Lower-skilled workers accounted for most of the unemployed and required significantly greater social services during the recession.

North Carolina's unemployment rate has consistently been higher than the nation during the past few years. This can be attributed to the mix of industries located in the state as well as the educational qualifications of the state's workers. An examination of historical data finds that individuals with a baccalaureate degree were half as likely to be unemployed as the average worker, while individuals without a high school degree were twice as likely as the average worker to be unemployed. Furthermore, workers with a baccalaureate degree can expect to earn \$1.5 million more over a 30 year career than a high school dropout, and this gap widened by nearly 50 percent during the past three years alone. Low-skill and high-skill jobs are being created at a rapid rate, but the chasm between the education required and earnings expected appears to be growing. This wage gap also limits the opportunities for lower-skilled workers to search for the "next" better paying job because the skill gap is so wide as well. With lower wages, these workers frequently

work two jobs to make ends meet, leaving little time to invest in the long-term education and training required to move into a better paying career. Ironically, this same gap is an important reason why there is a greater shortage of prepared, skilled workers available to take advantage of the better-paying jobs that are going unfilled in so many industries.

10. Workers employed in certain industries – e.g., manufacturing, finance, distribution, or construction – were more likely to lose their jobs and to need retraining to find work.

Even before the recession started, net job declines were already occurring in some sectors – driven by industry-specific economic forces. Furthermore, because some areas of the state are more concentrated in these activities, those areas were especially hard-hit by lay-offs in these industries. The low-skilled workers most significantly impacted by lay-offs were not those who were unable to handle multiple tasks requiring different skill sets. Employers in a number of industries repeatedly cite examples of how skill demands are changing for jobs and how workers must be capable of doing multiple jobs. Furthermore, these companies often require fewer skilled workers to produce the same or more output. The most successful workers were those with post-secondary education at some level – university, community college, and industry-driven credentialing – who could adapt to these new workplace realities.

#### Preparing a call to action

The Great Recession was felt across the full breadth of the state impacting all elements of industry, geography and occupation. The recession served to accelerate many long-term economic trends, and exposed the lingering truth that there is now an extreme imbalance between the demand for jobs and the supply of workers to fill those jobs. It significantly exposed the challenges facing workers across the state as particularly acute because so many are ill-prepared for the next generation economy.

While the study identified ten key challenges that could stand alone as a critical priority, it is notable that they are all interrelated and must be addressed as long-term issues that require time and investment to overcome. Addressing these workforce challenges as a whole will require intentional action. Furthermore, addressing one or more of these issues in isolation will not likely fundamentally shift the trajectory of the state's workforce. Only dealing with the issues holistically, and in collaboration with North Carolina's educational and economic development systems, will do so.

As leaders review the key workforce challenges facing the state, North Carolina must consider policies aimed at:

- Transitioning workers dislocated due to structural change by considering questions about how North Carolina can help existing and dislocated workers adjust to a new work environment.
- Guiding dislocated middle-skilled workers competing for good-paying jobs by identifying at-risk
  workers in "old middle" jobs and helping those workers access the education and training
  required for careers in "new middle" jobs.
- Helping workers adapt to increased employer and labor market demands by assessing how to
  efficiently connect jobseekers to education and training, ensuring that the state's post-secondary
  educational system is prepared to deal with chronic skill mismatches, and enhancing the ability

- of workers, jobseekers, or students to improve their skills to command better jobs with higher wages.
- Engaging education at all levels more actively in the state's future prosperity by ensuring that students enroll in educational programs that teach the right skills, linking the curriculum offered and industry needs, and integrating work-relevant learning into the academic experience.
- Enhancing economic opportunity for workers in micropolitan and rural areas by focusing on issues related to how far workers will commute, how to take advantage of changing rural workforce demographics, and making sure that community colleges, in particular, can adapt to the customized needs of small numbers of workers seeking specialized training.
- Encouraging employers and communities to adapt to the potential impact of large-scale retirements by helping older workers remain in the workforce, continue learning, and mentor other workers while also helping companies develop appropriate success plans, especially for key occupations.
- Increasing the availability of talent from high-skill in-migrants by ensuring that the state continues to maintain its competitive edge in attracting these in-migrants while also identifying ways to encourage out-of-state migration to the state's rural and micropolitan areas.
- Managing worker in-migration amid the limited availability of jobs in the short-term by promoting in-migration of entrepreneurs and skilled people into rural areas, addressing skill shortages in certain industries, and improving access to education and training for rural/micropolitan workers.
- Ensuring greater employment stability through earned post-secondary education or learned adaptable skills by guiding students more effectively in their career planning and addressing the substantial education or training gap that must be met for low-skilled jobseekers or workers to compete for good-paying jobs.
- Preparing workers for changes in certain sectors by targeting workforce development resources and the workforce system to the needs of key industries, especially those at-risk or those that offer the best opportunities while also ensuring that industry has workers prepared for the "mission critical" jobs in the state's economic driver industries.

When all is said and done those individuals who are well prepared for the transformation will be best able to adapt to the needs of jobs that offer the greatest opportunity while ill-prepared workers are much more likely to be left behind. The tragedy in this context is two-fold -- a larger number of individuals will be at risk of being left behind while very good job opportunities go unfilled for lack of available workers. This creates a related pressure on the state's economy because if companies can't find the workers they need, then they cannot compete for global opportunities and will be left to stand by while global companies with better prepared workers elsewhere take advantage. This leaves North Carolina at risk of losing its competitive edge and losing even more jobs in the future.

An overarching goal for policy makers to consider is "How do we set policy to remove or lower barriers to education and training to ensure that all of North Carolina's citizens can take advantage of opportunities to gain the required education and skills to create a competitive workforce advantage for them and the state?" There are some occupations in which these barriers have created shortages while at the same time the state has many jobseekers who want to work. Improving this labor supply-demand match and

addressing the barriers to the efficient operation of this system provide the framework for action and will require direct involvement of local and state government, education, labor, economic development, businesses and community stakeholders.

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